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#### REMARKS

As a preliminary matter, the Examiner is thanked for reconsidering and withdrawing the Official Action issued on April 22, 2005. The Examiner is also thanked for the courtesies that were extended to the undersigned attorney in a telephone conversation on November 15, 2005, during which Applicants requested the withdrawal of the previously issued Official Action.

In a second preliminary matter, Applicants respectfully request confirmation that the Examiner has considered the references that were submitted in the IDS of November 14, 2003, and the Supplemental IDS of December 19, 2003. To this end, copies of the previously submitted PTO/SB/08A forms are enclosed herewith. The Examiner is respectfully requested to return the forms to Applicants with his acknowledgement and is thanked in advance for this consideration.

# Claim Objections

At the Examiner's suggestion, claims 22 to 24 are amended herein to further clarify that they are directed to laminates comprising the film or sheet obtainable by the process of claim 18. A basis for these amendments may be found in the claims as originally filed, for example.

Claim 28 is objected to as being in improper multiply dependent form, because it depends from both claim 1 and claim 27. Accordingly, claim 28 is amended herein to specifically recite all of the features of now-cancelled claim 1. This amendment is purely formal and unrelated to patentability. It does not change the scope of the claims, nor does it add any new matter to the application. Accordingly, Applicants respectfully request that the objection to claim 28 be withdrawn upon reconsideration.

#### Rejections under 35 U.S.C. § 112

Claims 7, 8, 11, 23 and 27 stand rejected under 35 U.S.C. § 112, second paragraph, as allegedly indefinite.

Claim 7 has been amended herein to include a definition of formula (V), which had previously been omitted as the result of an apparent clerical error. A basis for this definition appears in the specification on page 8 at line 2 and in claim 1 as originally filed, *inter alta*. Applicants respectfully submit that this amendment is sufficient to overcome the rejection

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under 35 U.S.C. § 112. Because claims 8 and 11 depend from claim 7, it is believed that these claims are also now definite within the meaning of the statute.

In this connection, Applicants note that no substantive rejection of claim 7 has been made. Accordingly, an early notice of the allowability of the subject matter of claim 7 is earnestly solicited.

Claim 23 is amended herein to replace the term "Kraft paper" with "kraft paper". The term "Kraft paper" is often capitalized, although it is not a trademark. Those of skill in the art understand what is meant by the term "kraft paper." For example, according to the website of the American Forest & Paper Association, kraft paper "is made essentially from wood pulp made by a modified sulfate pulping process." It is most commonly used in paper grocery sacks, and may be bleached or unbleached. Claim 23 is amended herein to remove the capitalization, however, in order to further clarify that this claim does not recite a feature that is identified by trademark only.

Claim 27 is also rejected as indefinite, for lack of an antecedent basis for the term "apparatus is one or two quench rolls". Because this term does not appear in Claim 27, but rather in claim 29, Applicants are amending claim 29 herein to replace the term "said apparatus" with "said surface". Claim 27, from which claim 29 depends, includes a proper antecedent basis for the term "said surface". Moreover, a basis for the "one or two quench rolls" may be found in the specification in the paragraph bridging pages 22 and 23, for example. Applicants respectfully submit that claim 29 as amended is in compliance with the requirements of the statute for proper antecedent bases, and respectfully request that the rejection of claim 27 be withdrawn upon reconsideration.

### Rejection under 35 U.S.C. § 102

Claims 27 and 29 to 31 are rejected as allegedly anticipated by U.S. Patent No. 5,817,384, issued to Furuta et al. (hereinafter "Furuta").

As is noted in the Official Action, the process of claim 27 includes the step of "contacting a surface of a paper sheet with a molten sheet of liquid crystalline polymer to form a coated paper sheet". In addition, however, claim 27 specifically recites that pressure is applied by "a surface having a temperature below a solidification temperature of said liquid crystalline polymer" which contacts the coated paper sheet while the liquid crystalline polymer is still at least partially molten.

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In contrast, however, Furuta merely lists various coating or lamination processes.

Notably, Furuta mentions <u>heat</u> bonding of the laminate's layers, <u>hot</u> rolls and press machines, <u>molten</u> liquid crystal polymers, and the <u>co-extrusion</u> of liquid crystal polymers (column 10 at lines 1 to 11, *emphasis supplied*) without once referring to the desirability of cooling the laminate. In Example 3, in column 13, Furuta describes laminating a liquid crystalline polymer to a polyethylene/paperboard laminate "by a press process"; however, even in this specific instance, there is no teaching or suggestion to cool the coated sheets. Because Furuta does not teach or suggest a cooling step for the liquid crystalline polymer laminate, Furuta does not set forth every element of claim 27.

Accordingly, Applicants respectfully submit that claim 27 is not anticipated by Furuta. It follows by statute that claims 29 to 31, which depend, directly or indirectly, from Furuta, are also not anticipated. Consequently, Applicants respectfully request that the rejection under 35 U.S.C. § 102 be withdrawn upon reconsideration.

#### Rejection under 35 U.S.C. § 103

Claims 1 to 6 and 8 to 26 are rejected as allegedly obvious over U.S. Patent No. 5,804,634, issued to Umetsu et al. (hereinafter "Umetsu").

The rejection of claims 1 to 4, 10, and 17 is rendered moot by their cancellation without prejudice herein. Applicants intend to reintroduce the subject matter of these claims later in the prosecution or in a continuing application.

In this connection, claims 12, 13, 19, 20, and 22 to 24 are amended herein to remove their dependency on now-cancelled claims 1, 10, and 17.

Applicants respectfully traverse the rejection of claims 5, 6, 8, 9, 11 to 16, and 18 to 26 for the following reasons:

Claims 5, 6, 8, 9, 11 to 16, and 18 to 26 are process claims and product-by process claims that depend, directly or indirectly, from claim 5. An important aspect of claim 5 is the use of an excess of the aromatic diol component (II in Umetsu, IV in the present application) over the nonaromatic diol component (III in Umetsu, II in the present application). As reported in U.S. Patent No. 5,326,848, similar syntheses from a "partially aromatic polyester" and aromatic hydroxycarboxylic acids, but without an excess of diol, result in poor quality polymers unless the polymerization is carried out in a solvent. The use of a solvent in such a polymerization is disadvantageous because it adds cost, for example the cost of the solvent itself, and the cost of separating the solvent from the liquid crystalline polymer and recovering

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the solvent. The excess of aromatic diol over nonaromatic diol is thus important in the claimed liquid crystalline polymer synthesis.

Umetsu, however, does not teach that an excess of aromatic diol over nonaromatic diol should be used. Because Umetsu does not teach or suggest every element of claim 5, Applicants respectfully submit that claim 5 is not obvious over Umetsu. Because claims 6, 8, 9, 11 to 16, and 18 to 26 depend, directly or indirectly, from claim 5, it follows by statute that they are also not obvious. Consequently, Applicants respectfully request that the rejection of claims 5, 6, 8, 9, 11 to 16, and 18 to 26 be withdrawn upon reconsideration.

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## Conclusion

Should any fee be required in connection with the present response, the Examiner is authorized to charge such fee to Deposit Account No. 04-1928 (E.L. du Pont de Nemours and Company).

In view of the above amendments and remarks, it is felt that all claims are in condition for allowance, and such action is respectfully requested. In closing, the Examiner is invited to contact the undersigned attorney by telephone at (302) 892-1004 to conduct any business that may advance the prosecution of the present application.

Respectfully submitted,

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Dated: January 11, 2006

Enclosures: Application Data Sheet

Copies of previously submitted PTO-1449 forms